

CLAIMS

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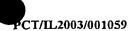
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What is claimed is:

- A circuit for receiving an input signal and providing an output signal comprising:
 - a first circuit branch including a first amplifying element for amplifying the input signal when the frequency is below a pre-determined frequency; and
 - a second circuit branch connected in parallel with said first circuit branch and including a second amplifying element for amplifying the input signal when the frequency is above a pre-determined frequency.
 - 2. A circuit as in Claim 1 wherein the first amplifying element comprises a Class D amplifier.
 - A circuit as in Claim 1 wherein the second amplifying element comprises an amplifier selected from the group consisting of Class A, Class B and Class AB amplifier.
 - 4. A circuit as in Claim 2 wherein the second amplifying element comprises an amplifier selected from the group consisting of Class A, Class B and Class AB amplifier.

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- 5. A circuit as in Claim 3 further comprising a power controller connected to the Class D amplifier to control the power supplied to the Class D amplifier.
- 6. A circuit as in Claim 1, wherein the second circuit branch includes a high pass filter.
- 7. A circuit as in Claim 7, wherein the high pass filter comprises a capacitor.
- 8. A circuit as in Claim 1 wherein the first branch comprises a low pass filter.
- 9. A circuit as in Claim 9, wherein the low pass filter comprises an inductor.
 - 10. A circuit as in Claim 7, wherein the first branch comprises a low pass filter.
 - 11. A circuit as in Claim 11, wherein the low pass filter comprises an inductor.
 - 12. A circuit as in Claim 1, wherein a feedback signal corresponding to the sum of a signal produced by the first circuit branch and a signal produced by the second circuit branch is mixed with the input signal.

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- 13. A circuit as in Claim 4 wherein the input signal comprises a horizontal deflection signal for a cathode ray tube.
- 14. A circuit as in Claim 4 wherein the input signal comprises a vertical deflection signal for a cathode ray tube.
- 15. A circuit as claimed in claim 1, wherein said second amplifying element of said second circuit branch has a cut-off frequency, and wherein said cut-off frequency may be adjusted.
- 16. A circuit as claimed in claim 1, wherein said cut-off frequency may be variably adjusted.
- amplifying the electric signal predominantly using a first amplifying element when the frequency of the signal is below a pre-determined frequency; and amplifying the electric signal predominantly using a second amplifying element when the frequency of the signal is above the pre-determined frequency.
- 18. The method of Claim 17 wherein the first amplifying element comprises a Class D amplifier.

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- 19. The method of Claim 17 wherein the second amplifying element includes an amplifier selected from the group consisting of Class A, Class B and Class AB amplifier.
- 20. The method of Claim 18 wherein the second amplifying element includes an amplifier selected from the group consisting of Class A, Class B and Class AB amplifier.
- 21. The method of Claim 20 wherein the electric signal includes a horizontal deflection signal in a cathode ray tube.
- 22. The method of Claim 20 wherein the electric signal includes a vertical deflection signal in a cathode ray tube.
- 23. The method of claim 17, further comprising:

adding to the electric signal a second electric signal corresponding to the sum of the signals produced by the first and second amplifying elements.

- 24. A circuit for receiving an input signal and providing an output signal comprising:
 - a first circuit branch including a first amplifying element;
 - a second circuit branch connected in parallel with said first circuit branch and including a second amplifying element,

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wherein said input signal passes predominantly through said first amplifying element if the frequency of the input signal is below a pre-determined frequency and wherein said input signal passes predominantly through said second amplifying element if the frequency of the input signal is above said pre-determined frequency.

- 25. Apparatus for supplying substantially constant voltage substantially irrespective of the current sourced or sinked within an operating range of power to a load comprising:
 - a voltage source to provide a voltage between first and second terminals;
 - a pulse width modulation controller connected to receive at

 least a portion of the voltage between the first and second
 terminals of said voltage source and to produce an output;
 - an inductor having a first terminal connected to the output of the pulse width modulation controller and a second terminal connected to ground;
 - a first capacitor connected between the first terminal of the voltage source and ground; and
 - a second capacitor connected between the second terminal of the voltage source and ground,

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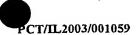
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wherein the voltage between the first terminal of the voltage source and ground is substantially constant.

- 26. Apparatus in claim 25, wherein the voltage between the first terminal of the voltage source and ground is adapted to supply power to a class D amplifier.
- 27. Apparatus in claim 26, wherein the voltage between the second terminal of the voltage source and ground is adapted to supply power to a class D amplifier.
- 28. A circuit as in claim 7, wherein the power controller comprises:
 - a voltage source to provide a voltage between first and second terminals;
 - a pulse width modulation controller connected to receive at
 least a portion of the voltage between said first and
 second terminals of said voltage source and to produce an
 output;
 - an inductor having a first terminal connected to the output of the pulse width modulation controller and a second terminal connected to ground;
 - a first capacitor connected between the first terminal of the voltage source and ground; and



a second capacitor connected between the second terminal of the voltage source and ground, wherein the class D amplifier is supplied with voltage between the first terminal of the voltage source and ground.

29. A circuit as in claim 28, wherein the class D amplifier is supplied with voltage between the second terminal of the voltage source and ground.